DOCUMENT RESUME

ED 063 484 VT 015 462

TITLE	AIAA Employment Workshops (September 1, 1970-December 31, 1971). Volume II, An Analytic Report on Some Effects of Twenty-Two Workshops.
INSTITUTION	American Inst. of Aeronautics and Astronautics, New York, N.Y.
SPONS AGENCY	Manpower Administration (DOL), Washington, D.C.
PUB DATE	31 Dec 71
NOTE	72p.
EDRS PRICE	MF-$0.65 HC-$3.29
DESCRIPTORS	*Aerospace Industry; Demonstration Programs; *Employment Services; Engineers; Followup Studies; Job Placement; *Professional Personnel; *Program Effectiveness; Program Evaluation; Scientific Personnel; Scientists; Unemployment; Vocational Counseling; *Workshops
IDENTIFIERS	American Institute of Aeronautics and Astronautics

ABSTRACT

In response to growing unemployment among professional personnel in the aerospace industry, a series of 175 workshops were conducted in 43 cities. Nearly 15,000 unemployed engineers and scientists attended the workshops and received job counseling and placement services from volunteer groups working to match skills and jobs. To evaluate the effects of the workshops on applicants' job-hunting techniques, success at finding employment, and income, 22 workshops in 11 cities were selected for analysis. Data were obtained during the workshops and from mail surveys 2 and 6 months after attendance. At the end of the workshops 91 percent of the participants felt that the sessions had been highly valuable. Two months later, 22 percent had found permanent jobs, generally in fields other than aerospace. However, 27 percent of those in a control group found permanent jobs during the same period, indicating that the workshops did not have a positive effect on employment. After 6 months, an additional 25 percent had found employment. The survey respondents indicated that the greatest benefits of the workshops were in improving job-hunting techniques and interviewing skills. Two other volumes are available as VT 015 461 and 015 463 in this issue. (BH)

ED 063484

AIAA
EMPLOYMENT WORKSHOPS

September 1, 1970—December 31, 1971

VOLUME II

ANALYTIC REPORT

VT015462

This report of a demonstration project was prepared under a contract with the Manpower Administration, U.S. Department of Labor, under the authority of the Manpower Development and Training Act. Organizations undertaking such projects under the government sponsorship are encouraged to express their own judgment freely. Therefore, points of view or opinions stated in this document do not necessarily represent the official position or policy of the Department of Labor.

U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
OFFICE OF EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY

AIAA EMPLOYMENT WORKSHOPS

September 1, 1970 - December 31, 1971

Volume II
An Analytic Report on Some Effects of Twenty-Two Workshops

A Demonstration Project

Undertaken by the American Institute of Aeronautics and Astronautics in 43 cities in 25 States of the United States

and

Funded by the U.S. Department of Labor
Manpower Administration
Contract #82-36-71-01

This report is in three volumes of which this is the second. Volume I is a general overview of the Employment Workshop Program. Volume II is an analysis of the effectiveness of the program based on survey data collected two and six months after the conclusion of some of the early Workshops. Volume III is a handbook telling in detail exactly how to organize and operate a Workshop. It contains all the philosophies, techniques, procedures and materials which are a part of the Workshops. An effort has been made to have as little repetition of material as possible and each volume tries to stand on its own.

CONTENTS

	Page
ABSTRACT	1
Background and Rationale of Project	1
Highlights	3
PURPOSE OF STUDY	6
Background	6
Research Objectives	7
DESCRIPTION OF WORKSHOP	8
TECHNIQUES	10
Data Collection Instruments (Questionnaires)	11
Response Rates	11
CHART 1 - RESPONSE RATES THROUGHOUT STUDY	12
FINDINGS	13
Key Data Obtained at Time of Workshop	13
Behavior with Respect to Session - Attendance and Participation Evaluation of Workshops	13
Key Data from Two and Six Month Follow-up	14
Demographic Characteristics of Those Who Did and Did Not Find Permanent Employment	16

EXHIBITS

1a. Age Ranges of Attendees and Comparison Group	18
1b. Educational Levels of Attendees and Comparison Group	19
1c. Academic Areas and Professional Fields of Attendees and Comparison Group	20
1d. Former Employers of Attendees and Comparison Group Who Were or Who Became Unemployed	21
1e. Schedule of Workshops	22
2a. Two Month Follow-up Questionnaire	23
2b. Comparison Group Questionnaire	24
2c. Six Month Follow-up Questionnaire	25

CONTENTS

Page

TABLES

1. Permanent Employment Status of Participants..... 26

2. Current or Last Full Time Income of Participants..... 27

3. Time Out of Work for Unemployed Participants..... 28

4. Percentage Who Had Contacted State Employment Service (SES)..... 29

5. Preparation of More Than One Version of Resume..... 30

6. Number of Companies Contacted by Workshop Participants..... 31

7. Workshop Attendance Rates by Session..... 32

8. Evaluation of Workshops by Participants..... 33

9. New Employment Rates Two Months After Workshop..... 34

10. Estimated New Employment Rates Six Months After Workshop..... 35

11. Comparison of Salaries; Former Salary vs. New Salary..... 36

12. Reported Use of Aerospace Experience in New Job..... 37

13. Reported Use of Professional Skills in New Job..... 38

14. Reported Industry of New Employment..... 39

15. Demographic Characteristics of Those Who Attended All Three Sessions..... 40

16. Academic Areas and Professional Fields of Those Who Attended All Three Sessions..... 41

17. Types of Companies Contacted..... 42

18. Number of Companies Contacted..... 43

CONTENTS

Page

TABLES (continued)

19. Contacts with and Perceptions of "Helpfulness" of State Employment Service (SES)..... 44

20. Preparation of More Than One Version of Resume..... 45

21. Changes in Job-Seeking Approach Reported at Two Month Follow-up and Attributed to Workshop..... 46

22. Perceived Value of Workshop in Finding New Job by Those Who Attended All Three Sessions..... 47

23. Factors Perceived To Be "Mainly Responsible" in Getting New Jobs..... 48

24. Evaluation of Aspects of Workshop Program..... 49

25. Suggested Improvements in Workshop Contents..... 50

26. Willingness to Recommend Workshop..... 51

ABSTRACT

Background and Rationale of Project

In response to unprecedented employment cut-backs throughout the aerospace industry, the American Institute of Aeronautics and Astronautics (AIAA) has, since March 1970, been providing workshops offering aerospace professionals, who are unemployed,or who feel they are about to become unemployed, guidance in techniques of seeking permanent employment, preferably outside the aerospace industry. These workshops have been supported by U.S. Department of Labor contract #82-36-71-01 since September 1, 1970.

A decision to fund all such AIAA workshops across the country was made subsequent to an earlier decision to fund and track four workshops in each of five cities where the need for a program to aid aerospace professionals was most pressing. This twenty workshop, five city experimental and demonstration program was funded in order to determine (as stated in the AIAA proposal), "whether such an operation is viable. If so, the success of the entire program throughout the entire country can be insured and the success of like programs for other professionals in other fields may well also be proved."

It should be noted that the experimental and demonstration project itself was subsequently modified to track twenty-two workshops in eleven cities, as follows:

City	Number of Workshops
Philadelphia	5
Dallas-Fort Worth	4
Seattle	4
Huntsville	2
Cleveland	1
Hartford	1
San Diego	1
Washington, D.C.	1
Buffalo	1
Boston	1
Long Island	1

It is this series of workshops to which this analytic report addresses itself. Many other workshops were conducted under the same contract and were not tracked. Many, no doubt, benefited from experience gained from those earlier

?

workshops which are reported here and may have had different and possibly greater effects.

Each workshop consisted of three sessions. Recruitment was by direct communication to AIAA members and other professionals and by posters and any other available form of communication to local aerospace professionals; recruitment was not restricted to AIAA members.

Content of the workshop included: knowing one's own capabilities; researching the job market, "marketing" strategy; resume and letter writing; how to interview.

Broadly, the tracking of individuals who attended the workshops was to establish the workshops' effects on:

- securing regular employment, and in what industry;
- level of income;
- techniques for obtaining job;

and to relate such effects to characteristics of the attendees (e.g., age, education) and area.

Techniques to be used were:

- comparison (with respect to employment status and job-seeking behavior) with a quasi-control group who had applied for attendance at the workshops but did not, in fact, attend and who were not too dissimilar with respect to age, education and nature of previous employment from those who did attend all three sessions;
- Opinion survey among those who attended of the value of the workshops with respect to obtaining employment.

Data were obtained at each session of a workshop and (on a more limited scale) by mail, two months after and six months after attendance. The quasi-control or comparison group (as it is henceforth referred to) was also contacted by mail two months after, with a parallel questionnaire.

Highlights

1. Summary of Key Data Obtained at the Workshops

- At the end of each session (three per workshop) attendees were asked how valuable they thought it had been. Eighty-one percent attending the first session thought them "very" or "quite valuable." At the second and third sessions, the equivalent figures were 96% and 93%. For the workshops as a whole, at the end of the third session, the sum of "very" or "quite valuable" responses was 91%.

- At the first sessions, the total number who attended was 1,805, at the second, 1,444 and at the third it was 1,190; 1,134 attended all three sessions.

- It will be noted that between the first and second and the second and third sessions, there was an appreciable drop-off. The reasons for this are not fully understood, although there has been an attempt to find out by direct questioning of some drop-outs. Answers tend to be on the "couldn't make it," "car broke down" type, which cannot really explain so large a drop-out rate.

2. Summary of Key Data Obtained at the Two Month Follow-up
(Based on 605 mail questionnaires returned by those who had attended all three workshops sessions, i.e., 53% response; and for the comparison group, 220 questionnaires out of 478 individuals who did not eventually attend any sessions, i.e., 46% response.)

- Two months after attendance at all three sessions of a workshop, 22% of those who were unemployed at the time of the workshop or who became unemployed thereafter (and who responded to the mail questionnaire) had found a new, permanent job (103 out of 459 individuals.) Sixty-six percent of these job-finders had found their new employment outside aerospace.

- The comparable figures among the comparison group were: 27% of those unemployed at the time of the workshops, or subsequently, had found new permanent employment within two months (38 out of 143), 81% outside aerospace.

- Thirty-nine percent of the workshop attendees who found new employment said they were using aerospace experience in the new job to a "considerable extent," 57% said they were using their professional skills to a "considerable extent." Corresponding comparison group figures were: 24% and 62%.

- The comparison group was not large in number compared with the test group. Comparison of the two groups has to be made with caution; in those attributes which were measured - age, education, academic and professional fields, and former employment, the differences are minor. Yet it cannot be said with confidence that the only difference between the two groups is their attendance or non-attendance of the workshops.

- A conservative interpretation would be that there is no evidence that the workshops studied had a positive effect on the chances of securing a new, permanent job, nor that they particularly diverted those who attended away from aerospace, which was one of the goals of the program. (The observed difference between workshop attendees and the comparison sample, with respect to utilization of aerospace experience can largely be attributed to the comparison group's finding new employment outside aerospace more frequently than the workshop attendees. As noted, there is no significant difference in utilization of professional skills.)

- Median annual income of those who had found new jobs within two months of attending the workshops fell slightly from the level of their previous employment from just below $15,000 to $14,000.

- Put in other terms, 47% experienced no change, 38% suffered a decrease and 15% actually gained in income.

- Differences in the number of companies claimed to have been contacted, in the aerospace and non-aerospace industries, between workshop attendees and the comparison group were not substantial, although some (statistically non-significant) tendency can be observed for those who attended to be more prone to contact non-aerospace companies than those in the comparison group. (34% of the workshops' attendees who were unemployed at the time of the workshop, or shortly thereafter, became unemployed, claimed to have contacted more than 50 non-aerospace companies by the time of the two-month follow-up, compared with 25% of the comparison group.)

- One notable difference between the behavior of those who attended the workshop and the comparison group was in the number of different resumes prepared. Of those who attended the workshop and were, or shortly afterwards, became unemployed, 91% had prepared more than one resume two months after the workshops ended, compared with 73% among the equivalent members of the comparison group. (Prior to the workshops, incidentally, only 53% of those who attended had prepared more than one.) The lesson of packaging oneself for different markets does seem to have been learned.

- Two months after the workshops, 93% of those who were unemployed at the time of the workshops, or who shortly afterwards became unemployed, had contacted the State Employment Service. Twenty-six percent found the Service helpful. There are no significant differences in securing new employment between those who did and those who did not contact the Service. (At the time of the workshops, 69% had contacted their State Employment Service; again only 26% thought it was helpful.)

3. Summary of Key Data Obtained at the Six-Month Follow-up
(Based on 251 returned mail-questionnaires, out of 356 who were contacted, 71% response. The 356 reported themselves unemployed at the time of the two-month follow-up.)

- After six months, 25% of those who responded to the six-month follow-up questionnaire said they now had obtained permanent employment. Assuming that those who responded to the two mail questionnaires (the two and six-month follow-ups) were representative of those who attended the workshops, it can be estimated that 42% of those who were unemployed at the time of the workshops or who became unemployed within two months, had obtained new permanent employment within six months.

- Those who, having participated in the workshops, found employment within two months were considerably younger than those who found employment in the succeeding four months who, in turn, were younger than those who were still unemployed after six months.

4. Opinions about the Workshops' Value in Finding New Jobs

- Of the 103 individuals who responded to the two-month follow-up questionnaire and who had found new and permanent employment, within two months of the workshops they attended, 18% said they were helpful to them, and a further 37% said they were "perhaps" of some help in securing the job. Almost identical percentage responses were obtained from those 63 individuals who had found a job in between the two and six month follow-ups.

- Of those who reported that they were unemployed at the time of the workshops or who became unemployed shortly afterwards, all but 2% said they would recommend the workshops to others. This suggests that participants believed the experience worthwhile months after the workshops, just as they did at the time, even though they were not, on the whole, willing to ascribe much help in obtaining work.

- The greatest help was perceived as being received in the areas of improving letters and resumes, and interviewing skills, i.e., in techniques needed to secure employment.

PURPOSE OF STUDY

Background

The objective of the study, described in subsequent pages, is to evaluate the effects of workshops directed at helping aerospace professionals who had become unemployed or who felt they were about to become unemployed, as a result of the cut-back in defense and other aerospace spending. The help was intended to improve their chances of finding employment, preferably outside the aerospace industry, by showing them how to assess their own capabilities, how to research the job market, how to write letters and resumes tailored to the prospective employer and how to approach an interview. A large proportion of aerospace professionals had never had to compete for jobs and had no understanding of the strategy and tactics of finding employment in a market which was no longer clamoring for their skills. They needed, it was thought by the American Institute of Aeronautics and Astronautics (AIAA), instruction in such strategy and tactics, along with a boost to morale, to encourage them to go out and look for work.

AIAA commenced such workshops in March, 1970 and on September 1, 1970 a contract was signed with the United States Department of Labor, Manpower Administration[1]/ for a demonstration project, to cover four workshops in each of five cities. Administrative problems subsequently led to a change in this design (voluntary labor, used to conduct workshop sessions and administer questionnaires, cannot be relied upon in the same way as paid professional labor). The result was that missing workshops from Dallas-Fort Worth, Seattle, Huntsville and Boston (four of the five originally selected cities) were made-up in other cities, within the time constraints of the original plan. This led to greater geographic distribution, but changed the selection criteria from the five cities judged to be most in need of assistance, (remaining of the AIAA's independent initial workshops in Long Island and Los Angeles), to the eleven cities judged most in need and scheduled to conduct workshops in a time frame permitting evaluation to be completed by the originally proposed date.

It should be noted that AIAA was, in addition, funded to conduct workshops in a further 32 cities, but no formal evaluation of these was conducted. A full report on the entire program is in Volume I of this report. This analytic report, restricts itself to twenty-two workshops in eleven cities. It is understood that the later workshops, not covered in this study, benefitted from the experience of the earlier workshops and may, therefore, have had different effects upon the participants.

---

[1]/ Contract Number 82-36-71-01

Research Objectives

The research objectives were to measure, so far as practical constraints permitted, the effect of the workshops upon:

- participants' employment-status; (Did they contribute to securing new and, hopefully, permanent employment, inside and outside the aerospace in dustry?)
- participants' level of income;
- techniques of obtaining a job;

and to relate such effects to characteristics of workshop participation (e.g., their age and education).

An attempt was also to be made to identify elements of the workshops program which participants perceived to be of most value.

DESCRIPTION OF WORKSHOP

The primary objective of the Workshop is to prepare professionals to be competitive in their job search and to teach them the most effective techniques of presenting themselves to potential employers in an "employer's" or "buyer's" market. Another objective is to bolster morale and improve attitudes.

Employment Workshops are a means of helping professional people to organize and conduct effective search programs. The method used is a discussion seminar technique guided by specially trained "counselors" or group leaders using a structured lesson plan. Material is covered by group discussion, individual homework and criticism of each participant's work by the other participants.

A basic Workshop consists of three sessions, 2 1/2 to 4 hours long, spaced one week apart. At each session all the participants are gathered in a large room for introductory remarks pertinent to that session and any announcements which need to be made. This does not take more than 20 minutes, and participants are then separated into small groups of four to eight with one trained counselor.

The first session sets the stage for developing a systematic job search. It is an introduction to career changes and job finding and discusses an overview of the employment situation and the personal circumstances of the participants. Financial, personal and professional self-analysis and skills evaluation and their importance are explained. Sources of employment information and methods of finding employment are discussed at length. The concept of the "hiring influence" is introduced, as is the process of "de-selection." Then the homework assignment for the next session is given. This is the preparation of a new resume and a personal sales letter. Considerable discussion is then given over to the preparation of these resumes and letters and the reasons for doing them in the suggested manner. Participants are then asked to bring eight copies of each to the next session so they may be critiqued by the people in the group.

The second session is devoted to personal sales materials, the letters and resumes. At both this and the third session, participants are asked to sit with a different counselor and participants, thus insuring a broader exposure to varied ideas and approaches. The resumes and letters are individually critiqued. An effective counselor will see to it that most of the discussion is by the participants and that he merely acts in the capacity of a discussion leader, insuring that all the pertinent points are covered. In addition, at this session preparation of personal sales material and distribution methods are discussed, plus systematizing the sales campaign. The important subject of references is also covered, and finally the homework for the third session is given, that is, to prepare for a specific interview and to bring a revised letter and resume plus an interview kit.

The third session is on interview techniques and salary negotiation. The importance of approaching an interview from the viewpoint of the employer's self interest is discussed, along with a review of the various types of interviews which can take place and the absolute necessity of a maximum amount of research on an employer by whom the participant may be interviewed. General preparation for the interview is covered, and finally questions which are almost certain to come up in any interview along with how best to answer them are treated. The main portion of the final session is given over to role playing in which the counselor will act as an interviewer and each of the participants in turn will be interviewed. The interview will be one which the participant himself has structured, giving the type of organization, the type of job for which he is being interviewed, and indicating who the interviewer is. Each interview is critiqued by the other participants.

TECHNIQUES

The best objective measure of the effect of the workshops upon participants would have been to select two groups from among applicants, one group attending the workshops and the other not - taking, say, the first applicant for the workshop (experimental) group, the next for the non-workshop (control) group, and so on. This, or some similar technique for producing two equivalent samples from the population of applicants would have permitted comparisons of subsequent job-search behavior and success or failure in obtaining new employment. Such a course of action was suggested to AIAA by Humanic Designs Corporation (HDC) and by the U.S. Department of Labor representatives, but was deemed to be inconsistent with AIAA's responsibilities to the unemployed.

HDC, therefore, proposed a considerably less rigorous procedure, whereby the control would be made up of individuals who applied for involvement in the workshops but did not attend. This group would be used as a quasi-control if it turned out not to be significantly different from the experimental group with respect to age, education and occupation. It would be used as a comparison group, and differences or the absence of differences between the experimental and comparison group would be treated with caution.

As it turned out, the comparison group was, on the whole, similar demographically to the experiemntal group and it was judged [2]/to be worthwhile to examine differences between the two, to see if there were any indications of differences between them that were sufficient to suggest positive effects of the workshops, with respect to securing employment and job search behavior.

At the design stage, it had been intended to follow-up both groups at two and six-month intervals after the date of the relevant workshop. The experiemental group was, indeed, followed up at both intervals, but the comparison group was not, since it appeared that attrition due to low response rates would completely invalidate any comparison.

Apart from the tracking of participants by a mail questionnaire at two and six month intervals after attendance at the workshops, questionnaires were administered at each of the three sessions of a workshop, being completed by participants under the supervision of the counselors. At that time, data were gathered on demographic characteristics, certain "job search" behavior and immediate attitudes toward each session and the workshop as a whole.

2/ By HDC and Robert Lee Associates, who were responsible for implementing the design. Demographic characteristics of the samples are shown in Exhibits 1a - 1e.

Data Collection Instruments (Questionnaires)

Copies of data collection instruments are appended. (Exhibits 2a, b, c)

Response Rates

Chart 1, as shown on the next page, gives the number of workshop participants from whom questionnaires were obtained at the time of attendance and who attended all three sessions of each workshop being studied. This group - those who went to a full workshop - is the one which was tracked--through by mail questionnaire at two and six month intervals. The response rates achieved at these stages are shown.

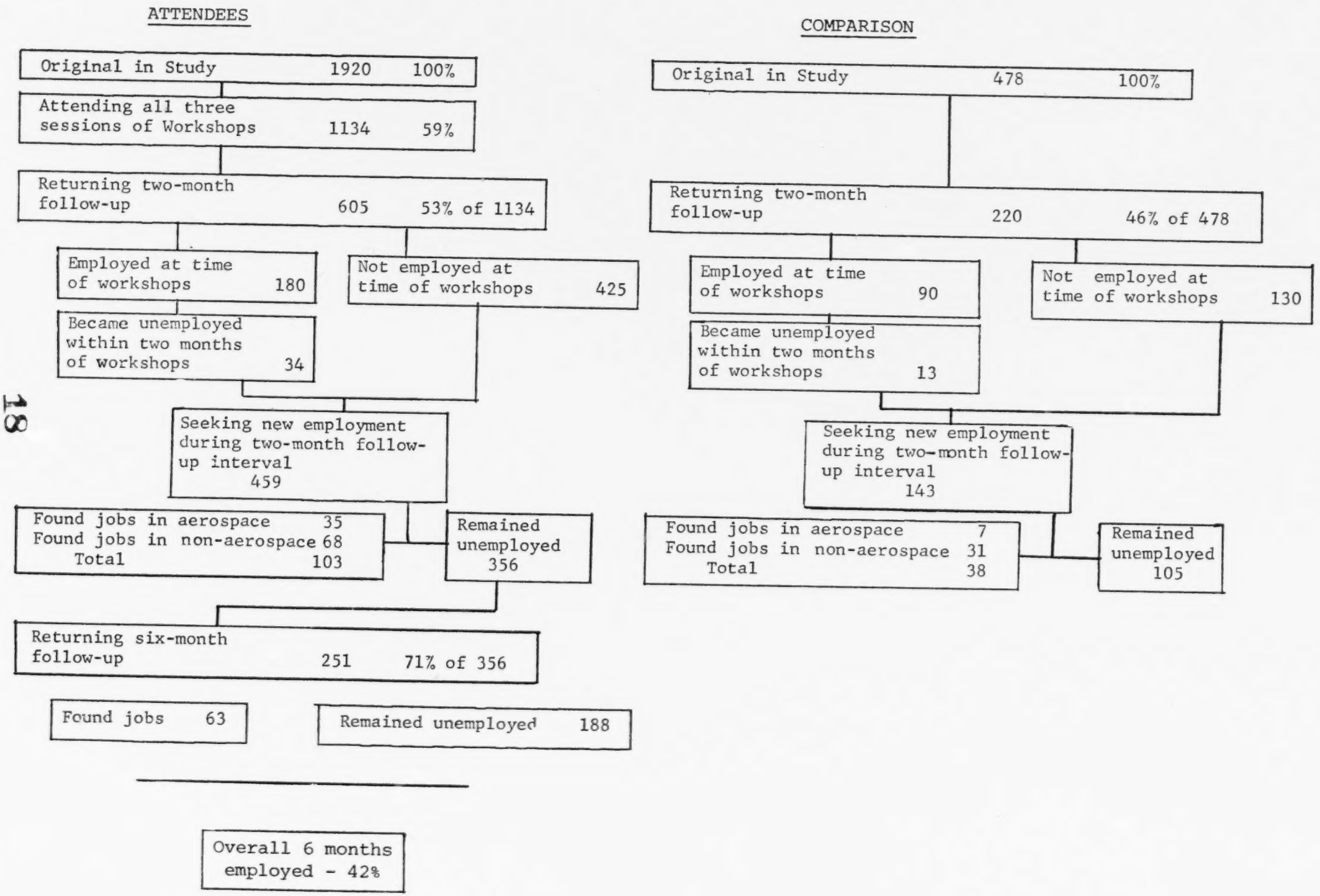
The chart also shows the number of individuals who applied but did not attend any session of the workshops (the comparison group) and the response to the questionnaire mailed out at the same time as the two month follow-up to those who attended the workshops.

These response rates are appreciably below what had originally been set for the study and cannot be regarded as completely satisfactory. In such cases it is always possible that non-respondents could, had their answers been collected, have substantially changed the statistics reported. Unfortunately, the volunteer resources available to AIAA did not permit the extensive follow-up of non-respondents originally planned.

The response rates achieved necessitate caution in interpretation of results based on the mail questionnaires.

CHART 1

Response Rates Throughout Study


ATTENDEES
Original in Study 1920 100%
Attending all three sessions of Workshops 1134 59%
Returning two-month follow-up 605 53% of 1134
Employed at time of workshops 180
Not employed at time of workshops 425
Became unemployed within two months of workshops 34
Seeking new employment during two-month follow-up interval 459
Found jobs in aerospace 35
Found jobs in non-aerospace 68
Total 103
Remained unemployed 356
Returning six-month follow-up 251 71% of 356
Found jobs 63
Remained unemployed 188
COMPARISON
Original in Study 478 100%
Returning two-month follow-up 220 46% of 478
Employed at time of workshops 90
Not employed at time of workshops 130
Became unemployed within two months of workshops 13
Seeking new employment during two-month follow-up interval 143
Found jobs in aerospace 7
Found jobs in non-aerospace 31
Total 38
Remained unemployed 105
Overall 6 months employed - 42%

FINDINGS

The main findings of the study are presented, in Table form, on pages 26 through 51. The following text interprets these Tables, in sequence. Note that individuals who did not answer a particular question have been eliminated from the base for percentaging. All results are given in percentage form.

Key Data Obtained at Time of Workshop

Employment: Seventy-four percent of attendees reported, at the time of the workshop, that they had no permanent employment (Table 1). Attendees reported a median income, when last permanently employed, just below $15,000 per year. About one in three earned less than $13,000; less than one in ten earned more than $20,000 (Table 2).

Those out of work at the time of the workshop had a median unemployment period of approximately twenty-one weeks. Twenty-two percent had been unemployed for over a year (Table 3).

Job Search Techniques: In order to find employment, or to secure themselves against the unemployment they expected, attendees reported that they had taken certain action; we have singled out contacting the State Employment Service (SES), resume preparation and number and type of companies contacted (Tables 4,5, and 6).

Seven out of ten who attended a workshop and were out of work had contacted their SES prior to the sessions. Seventy percent of those who had made contact did not find the SES helpful.

Nine out of ten had prepared a resume; about half had prepared more than one version.

Both aerospace and non-aerospace companies had been contacted, with an emphasis toward non-aerospace. One out of five had contacted over fifty non-aerospace companies.

Behavior with Respect to Session-Attendance and Participation Evaluation of Workshops:

Attendance at the sessions fell off sharply, so that of those who attended the first session only 62% attended the last (Table 7). Reasons for this are not known. AIAA volunteers attempted to find out (not formally as part of this study) by telephone calls, but no meaningful data emerged. Usually, the replies were excuses based on domestic problems, car breakdowns, etc., but they seem grossly inadequate to explain the large decline in attendance.

Participants of the entire three sessions of a workshop were, immediately afterwards (at the end of the third session), asked for their evaluation of the workshop. Nearly all were favorable (91%). Learning of specific techniques such as resume writing and interview conduct headed the list of reasons for favorable evaluations, followed by strategies of job hunting and defining career goals (Table 8). It is worth noting that an increased variety of resumes is one measurable achievement of the workshops (Table 19).

Key Data from Two and Six Month Follow-up

The bulk of this report is concerned with the data gathered two and six months after the workshops and it is to this that we now turn.

Employment: After two months, 22% of those who attended all three sessions of the workshops being studied (participants) and who did not have permanent employment at the time or who became unemployed within the two month follow-up interval, had found new permanent employment. The ratio of aerospace to non-aerospace was about 1:2 (Table 9).

Among the comparison group (who had not attended any workshop but had applied), 27% of those unemployed at the date of the workshop or who became so in the follow-up period had found new permanent employment. The aerospace:non-aerospace ratio is 1:4 (Table 9).

The differences are not statistically significant and the comparison group is not a true control. Consequently, one can only say that there is no evidence that attendance at the workshops increased a participant's chances of securing employment, especially non-aerospace employment, in the two month follow-up period.

From Table 10 one learns that an estimated 42% of those who were unemployed at the time of the workshop or who became so in the two month follow-up period had found new permanent employment within six months of the workshop. That is, 22% found new employment in the first two months and a further 20% found new employment in the next four months.

(As explained in the footnote to Table 10, the figures quoted for the "after two to six month period" are based on the assumption that the respondents to the six month follow-up questionnaire accurately represent the workshop participants who, at the time of the two month follow-up,were still out of work.)

No comparison group is available and it is not possible, therefore, to make even rudimentary estimates as to what effect the workshops may have had on the six month employment rate.

The ratio of aerospace:non-aerospace employment is about 1:4 (Table 14).

Participants who had found new permanent employment by the time of the two month follow-up reported, on average, reduced income in the new job (Table 11). Median annual income dropped from just below $15,000 to $14,000. Put in other terms, while 47% reported no change and 15% actually increased their income, 38% suffered some loss.

As described in Tables 9 and 14, about one third of the participants who had found work within two months of the workshops found it in aerospace, compared with 19% in the comparison group. It is not surprising, therefore, that (in Table 12) it is reported that aerospace experience is used in the new jobs by a greater percentage of the participants than of the comparison group. However, this seems to be mainly attributable to the fact of greater aerospace employment. When employed in non-aerospace industries, a much smaller percentage of participants report using aerospace experience "considerably" than when employed in aerospace, 20% compared with 76%. The comparison group reported 24%.

These figures do not suggest that the workshops were successful either in diverting participants away from aerospace compared with non-participants or that they diverted them particularly into jobs which, when not aerospace, used their aerospace experience.

In the reports of those who found employment in the "after two to six month" interval, it seems that the aerospace experience had dropped somewhat, reflecting, presumably, the drop in ratio of aerospace to non-aerospace employment already mentioned.

"Professional skills," as distinct from "aerospace experience," show a different pattern (Table 13). These are used, as reported, almost as much in the new non-aerospace jobs as in the aerospace jobs. "Considerable" use is as common among the comparison group as the participant group (62% compared with 57%). However, there is some evidence that greater use is being made of professional skills by workshop participants than by the comparison group since the "somewhat" category of answer is 28% compared with 9%. This is difficult to interpret but might indicate a small positive effect of workshop participation on locating jobs in which professional skills can be used.

Table 14 addresses the question of the type of industry in which participants found jobs in more detail than Table 9 and includes those who found jobs in the "over two to six month" period. It is more or less self-explanatory. Note that the "sales and service" figure rose to 14% among those who found employment in the "over two to six month" period.

Demographic Characteristics of Those Who Did and Did Not Find Permanent Employment:

Those who, having participated in the workshops, found employment within two months were considerably younger than those who found employment in the succeeding four months who, in turn, were younger than those who were still unemployed after six months (Table 15 (a)).

Difference in education levels do not appear to be significant (Table 15 (b)).

Table 16, which deals with academic areas and professional fields, does not indicate any trend except, perhaps, that those academically trained as electrical engineers were more likely to find employment than those from other engineering disciplines.

Job Search Techniques: When we compare participants of the workshops who were seeking employment at the time or within two months, with members of the comparison group, we see (Table 17), that the participants had a greater tendency to apply to aerospace allied industries and the comparison group, a greater tendency to contact sales and service organizations. Otherwise, there is little or no difference. In both groups, 85% had applied to aerospace companies.

It is not possible to draw any firm conclusions from this Table, except that it would seem possible that participants could have cast their net a little more widely.

On the other hand, Table 18 shows that, if anything, participants of the workshops contacted rather more non-aerospace companies than the comparison group - presumably this reflects the aerospace allied factor.

Overall, there is little to show that the workshops influenced the type of industry contacted or the number of contacts made.

Most (93%) of the participants had contacted the State Employment Service (SES) two months after the workshops; (76% said they had contacted them before the workshops which ties in closely with the data collected at the time of the workshop). Of those who had made contact, 74% did not find the SES helpful.

Similar figures were obtained from the comparison group.

It has been mentioned earlier that the number of different resume versions prepared had escalated apparently as a consequence of the workshops. Table 20 shows this quite clearly. Before the workshops (Table 5), 53% had prepared more than one resume. Two months later, of those who had attended, (and had

been seeking work) 91% had produced more than one; the comparable comparison group percentage was 73%.

This "resume effect" is seen again in Table 21, in which appear the responses to a question about changes in job seeking approach attributed to the workshop two and six months later. "Improved resumes" tops the list above "improved letters," which again is more frequently mentioned than "interview technique."

Participant Evaluation of the Workshops: At the two and six month follow-up periods, participants who had sought and found new employment were asked how valuable the workshops had been in assisting them to obtain these new jobs. At both stages approximately one in five perceived them as definitely helpful and about another two in five thought they had "perhaps" been of help, (Table 22). Subjectively, this seems a quite favorable response to a question of this kind.

However, as seen in Table 23, only 15% of those who had acquired new employment in two months, and 11% of those who had acquired new employment in the"over two to six month" period, gave the workshops credit for being "mainly responsible" for the new job. The individual's own efforts and experience and friends are seen as the major factors.

"Quite helpful but not of major significance" would seem to sum up these perceptions.

The workshops were perceived, two months later, as having given considerable help with respect to letters and resumes (the recurrent theme) quite a lot of help, too, with respect to improving interviewing skills and appreciable but considerably smaller help in the areas of employment trends, personal goals, job prospects and job agencies, (Table 24).

It is clear from Table 25 that participants felt that even more emphasis should have been placed on interviewing and also, that AIAA should operate a placement service.

Yet despite the guarded nature of the favorable comment and the desire for improvements, two months after the workshop 97% of participants said they would recommend the workshop to a friend (Table 26). There was a wide dispersion of favorable sentiment, even if it was not intense.

Exhibit 1a

AGE RANGES OF ATTENDEES AND COMPARISON GROUP

24

Exhibit 1a

Age Ranges of Attendees and Comparison Group

Age Bracket	Attendees	Comparison Group
N	605	220
25-34	25%	35%
35-44	31%	30%
45-54	35%	30%
Over 55	8%	5%

Exhibit 1b

EDUCATIONAL LEVELS OF ATTENDEES AND COMPARISON GROUP

Exhibit 1b

Educational Levels of Attendees and Comparison Group

Educational Level	Attendees	Comparison Group
N	605	220
Less than BS	9%	14%
BS	38%	29%
More than BS	27%	31%
MS	14%	12%
More than MS	8%	10%
PhD	4%	5%

Exhibit 1c

ACADEMIC AREAS AND PROFESSIONAL FIELDS
OF ATTENDEES AND COMPARISON GROUP

28

Exhibit 1c

Academic Areas and Professional Fields
of Attendees and Comparison Group

	Attendees	Comparison Group
N	605	220
Academic Area		
Aerospace Engineering	23%	22%
Electrical Engineering	22%	30%
Mechanical Engineering	27%	17%
All Others	28%	27%
NA	-	-
Professional Fields		
Aircraft Designs and Operations	28%	25%
Information Systems	16%	20%
Management, etc.	23%	23%
Materials and Structures	18%	18%
Flight Mechanics and Control	12%	10%
Missile and Space Systems	31%	28%
Vehicle Support and Testing	25%	21%
All Others	18%	12%
NA	11%	10%

Exhibit 1d

FORMER EMPLOYERS OF ATTENDEES AND COMPARISON GROUP
WHO WERE OR WHO BECAME UNEMPLOYED

Exhibit 1d

Former Employers of Attendees and Comparison Group
Who Were or Who Became Unemployed

	Attendees	Comparison Group
N	459	144
All Aerospace Manufacturers	78%	71%
Aircraft	40%	34%
Electronics	12%	15%
Other	26%	22%
Government	2%	7%
Aerospace Allied Industries	4%	3%
High Technology Industries	5%	2%
Manufacturers	2%	1%
Trades and Professions	-	-
Sales and Services	-	1%
Other	2%	1%
NA	7%	15%

Exhibit 1e

SCHEDULE OF WORKSHOPS

32

Exhibit 1e

Schedule of Workshops

City	Workshops	Attendees	Final Session Date
N	22	1920	
Philadelphia	5	422	10/14/70 11/4/70 11/25/70 1/21/71 3/9/71
Dallas-Ft. Worth	4	344	11/10/70 12/1/70 12/22/70 1/4/71
Seattle	4	407	11/23/70 12/14/70 1/25/71 2/15/71
Huntsville	2	153	11/11/70 12/3/70
Cleveland	1	87	2/12/71
Hartford	1	81	2/16/71
San Diego	1	109	2/2/71
Washington, D.C.	1	47	2/8/71
Buffalo	1	74	2/11/71
Boston	1	81	2/4/71
Long Island	1	115	3/12/71

Exhibit 2a

TWO MONTH FOLLOW-UP QUESTIONNAIRE

AMERICAN
INSTITUTE OF
AERONAUTICS AND
ASTRONAUTICS

1290 AVENUE
OF THE AMERICAS
NEW YORK, N.Y. 10019
AREA CODE 212
581-4300

Please circle the number in front of the statement which best describes your situation or opinion.

SECTION 1

1. Were you employed* at the time of the AIAA Workshop (2 months ago)?

(15)- 1. Yes, in the aerospace industry
2. Yes, not in the aerospace industry
3. No, or only part-time or temporarily

2. If you were employed then, did you leave your job since that time?

(16)-1. Yes
2. No

3. Are you employed* now?

(17)-1. Yes, in the aerospace industry
2. Yes, not in the aerospace industry
3. No, or only part-time or temporarily

If you are employed now, what is your salary?

(21)-1. less than $13,000
2. $13,001-$15,000
3. $15,001-$17,000
4. $17,001-$20,000
5. $20,001-$25,000
6. more than $25,000

4. What is your primary academic area? (circle only one)

(22)- 1. aerospace engineering
2. astronomy
3. biology
4. chemical engineering
5. civil engineering
6. electrical/electronic engrg.
7. geology
8. mathematics
9. mechanical engrg.

(23)- 1. medicine
2. metallurgy
3. physics
4. space sciences
5. other

* "Employed" means a full-time, hopefully permanent job.

RONALD SMELT, President, JERRY GREY, Vice President-Publications, FREDERICK L. BAGBY, Vice President-Section Affairs, JOHN C. HOUBOLT, Vice President-Technical
EDWARD H. SEYMOUR, Treasurer, ALLAN D. EMIL, Legal Counsel

DIRECTORS: MAC C. ADAMS, HOLT ASHLEY, WILLIAM H. AVERY, OSCAR BAKKE, B. G. BROMBERG, ROBERT H. CANNON, JR., EDGAR M. CORTRIGHT, A. SCOTT CROSSFIELD,
WILLIAM E. DOUGLASS, CHARLES W. DUFFY, JR., EDWARD N. HALL, CHARLES W. HARPER, RICHARD HUTTON, CHRISTOPHER C. KRAFT, JR.,
WALTER T. OLSON, ALAN Y. POPE, FLOYD L. THOMPSON, MARVIN WHITLOCK, CARLOS C. WOOD

5. What are your primary fields of professional competence? (circle up to 3)

(24)-1. aircraft design and operations
2. atmospheric and space sciences
3. chemical propulsion
4. information systems
5. management, social sciences and life sciences
6. materials and structures
7. flight mechanics and control
8. nonchemical propulsion and power systems
9. missile and space systems
X. vehicle support and testing

SECTION II TO BE COMPLETED BY PERSONS WHO ARE UNEMPLOYED NOW OR WHO WERE UNEMPLOYED FOR ANY LENGTH OF TIME.

6. For how long were you (have you been) not working in the aerospace industry?

(26)-1. less than 4 weeks
2. 4-12 weeks
3. 13-24 weeks
4. 25-52 weeks
5. more than a year

7. Indicate the category of your former employer, the industries where you found interim employment (if any), and where you sought full-time employment.

Former Employer (circle one)	Aerospace Manufacturing	Interim Jobs (circle as many as apply)	Where You Sought Work (circle as many as apply)
(27)- 1.	Aircraft	(30)- 1	(32)- 1
2.	Spacecraft	1	1
3.	Missiles	1	1
4.	Hydronautics	1	1
5.	Propulsion Systems	1	1
6.	Electronics	1	1
7.	Materials	1	1
8.	Other Manufacturing	1	1
	Government - Aerospace		
9.	NASA	2	2
X.	DOD-Civilian	2	2
Y.	DOD-Military	2	2
(28)- 1.	Other Govt. Aerospace	2	2
2.	Research Associations	3	3
3.	University, Teaching	3	3
4.	Consulting	3	3
5.	Transportation	3	3
6.	Electronics, Communication, Nuclear, Petroleum, Chemical, Power, EDP	4	4
7.	Automotive, Drugs, Paper, Metal Processing, Machinery, Instruments	5	5
8.	Construction, Skilled Trades, Finance and Professions, Food, Govt. Non-aerospace, Textiles, Maintenance	6	6
9.	Personal Services, Direct Sales	7	7
X.	Other_____	8	8

8. Did you contact the State Employment Service?

(36)- 1. Yes
2. No

If Yes, when did you first contact them?

(37)- 1. Before
or the Workshop?
2. After

Did you find their services helpful?

(38) 1. Yes
2. No

9. How many versions of your resume have you prepared?

(40)- 1. None
2. Only one
3. More than one

10. How many <u>aerospace companies</u> have you contacted regarding jobs?

(42)- 1. None
2. 1-5
3. 6-15
4. 16-50
5. More than 50

11. How many <u>nonaerospace companies</u> have you contacted regarding jobs?

(44)- 1. None
2. 1-5
3. 6-15
4. 16-50
5. More than 50

12. In light of your experience since the Workshop, please evaluate these aspects of the program from the viewpoint of having helped you improve your employment chances.

		IMPORTANCE TO YOU				HELP RECEIVED		
		Much	Some	Little		Much	Some	Little
Awareness of employment trends	(53)-	3	2	1	(59)-	3	2	1
Defining your personal goals	(54)-	3	2	1	(60)-	3	2	1
Researching job prospects	(55)-	3	2	1	(61)-	3	2	1
Knowledge of job agencies	(56)-	3	2	1	(62)-	3	2	1
Improving your resumes/letters	(57)-	3	2	1	(63)-	3	2	1
Improving interviewing skills	(58)-	3	2	1	(64)-	3	2	1

13. Specifically, what if anything did you do differently because of the Workshop to improve your chances of getting a job? (65)-_____

_____

_____

_____

14. What more could have been done in the Workshop to help you? (66)-_____

_____

_____

15. Would you recommend such Workshops to others?

(67)-1. Yes, even employed people 2. Yes, only if unemployed 3. No

SECTION III TO BE COMPLETED BY PERSONS WHO HOLD FULL-TIME JOBS WHICH THEY DID NOT HAVE 2 MONTHS AGO.

16. In what industry are you employed?_____(68)-_____

17. To what degree do you feel you are using your aerospace experience?

(69)- 1. Considerably
2. Somewhat
3. Very little
4. Not at all

18. To what degree d you feel you are using your professional skills?

(70)- 1. Considerably
2. Somewhat
3. Very little
4. Not at all

19. Did the Workshop help you obtain this job?

(71)- 1. Definitely yes
2. Perhaps
3. No

20. In your opinion, who or what was mainly responsible for getting you this job?

(72)-_____

_____

_____

_____

THANK YOU FOR YOUR COOPERATION AND HELP. PLEASE CHECK TO MAKE SURE YOU HAVE ANSWERED THE APPROPRIATE QUESTIONS, AND RETURN THIS QUESTIONNAIRE TO AIAA IN THE ENCLOSED, STAMPED ENVELOPE. IF YOU WOULD LIKE TO ADD ANY COMMENTS, PLEASE USE THE REMAINING SPACE ON THIS PAGE.

Exhibit 2b

COMPARISON GROUP QUESTIONNAIRE

AMERICAN
INSTITUTE OF
AERONAUTICS AND
ASTRONAUTICS

1290 AVENUE
OF THE AMERICAS
NEW YORK, N.Y. 10019
AREA CODE 212
581-4300

Please circle the number in front of the statement which best describes your situation or opinion.

SECTION I

1. What is your age (last birthday) ?

(11)- 1. 21-24
2. 25-34
3. 35-44
4. 45-54
5. over 55

2. What is your highest academic level?

(12)- 1. less than BS
2. BS
3. more than BS
4. MS
5. more than MS
6. PhD

3. Are you a member of AIAA?

(13)- 1. Yes
2. No

4. Were you employed * at the time of the AIAA Workshop (2 months ago)?

(15)- 1. Yes, in the aerospace industry
2. Yes, not in the aerospace industry
3. No, or only part-time or temporary

If you were employed then, what was your salary?

(16)- 1. less than $13,000
2. $13,001-$15,000
3. $15,001-$17,000
4. $17,001-$20,000
5. $20,001-$25,000
6. more than $25,000

5. If you were employed then, did you leave your job since that time?

(17)- 1. Yes
2. No

*"Employed" means a full-time, hopefully permanent job.

RONALD SMELT, President, JERRY GREY, Vice President-Publications, FREDERICK L. BAGBY, Vice President-Section Affairs, JOHN C. HOUBOLT, Vice President-Technical
EDWARD H. SEYMOUR, Treasurer, ALLAN D. EMIL, Legal Counsel

DIRECTORS: MAC C. ADAMS, HOLT ASHLEY, WILLIAM H. AVERY, OSCAR BAKKE, B. G. BROMBERG, ROBERT H. CANNON, JR., EDGAR M. CORTRIGHT, A. SCOTT CROSSFIELD, WILLIAM E. DOUGLASS, CHARLES W. DUFFY, JR., EDWARD N. HALL, CHARLES W. HARPER, RICHARD HUTTON, CHRISTOPHER C. KRAFT, JR., WALTER T. OLSON, ALAN Y. POPE, FLOYD L. THOMPSON, MARVIN WHITLOCK, CARLOS C. WOOD

6. Are you employed now?

(18)- 1. Yes, in the aerospace industry
2. Yes, not in the aerospace industry
3. No, or only part-time or temporary

If you are employed now, what is your salary?

(21)- 1. less than $13,000
2. $13,001-$15,000
3. $15,001-$17,000
4. $17,001-$20,000
5. $20,001-$25,000
6. more than $25,000

7. What is your primary academic area? (circle only one)

(22)- 1. aerospace engineering
2. astronomy
3. biology
4. chemical engineering
5. civil engineering
6. electrical/electronic engrg.
7. geology
8. mathematics
9. mechanical engrg.

(23)- 1. medicine
2. metallurgy
3. physics
4. space sciences
5. other

8. What are your primary fields of professional competence? (circle up to 3)

(24)- 1. aircraft design and operations
2. atmospheric and space sciences
3. chemical propulsion
4. information systems
5. management, social sciences and life sciences
6. materials and structures
7. flight mechanics and control
8. nonchemical propulsion and power systems
9. missile and space systems
X. vehicle support and testing

SECTION III TO BE COMPLETED BY PERSONS WHO ARE UNEMPLOYED NOW OR WHO WERE UNEMPLOYED FOR ANY LENGTH OF TIME.

9. For how long were you (have you been) not working in the aerospace industry?

(26)- 1. less than 4 weeks
2. 4-12 weeks
3. 13-24 weeks
4. 25-52 weeks
5. more than a year

10. Indicate the category of your former employer, the industries where you found interim employment (if any), and where you sought full-time employment.

Former Employer (circle one)		Aerospace Manufacturing	Interim Jobs (circle as many as apply)	Where You Sought Work
(27)-	1.	Aircraft	(30)- 1	(32)- 1
	2.	Spacecraft	1	1
	3.	Missiles	1	1
	4.	Hydronautics	1	1
	5.	Propulsion Systems	1	1
	6.	Electronics	1	1
	7.	Materials	1	1
	8.	Other Manufacturing	1	1
		Government - Aerospace		
	9.	NASA	2	2
	X.	DOD-Civilian	2	2
	Y.	DOD-Military	2	2
(28)-	1.	Other Govt. Aerospace	2	2
	2.	Research Association	3	3
	3.	University, Teaching	3	3
	4.	Consulting	3	3
	5.	Transportation	3	3
	6.	Electronics , Communications, Nuclear, Petroleum, Chemical, Power, EDP	4	4
	7.	Automotive, Drugs, Paper, Metal Processing, Machinery, Instruments	5	5
	8.	Construction, Skilled Trades, Finance and Professions, Food, Govt. Non-aerospace, Textiles, Maintenance	6	6
	9.	Personal Services, Direct Sales	7	7
	X.	Other_____	8	8

11. Did you contact the State Employment Service?

(36)- 1. Yes 2. No

If Yes, when did you first contact them?

(37)- 1. Before or 2. After the Workshop.

Did you find their services helpful?

(38)- 1. Yes 2. No.

12. How many versions of your resume have you prepared?

(40)- 1. None 2. Only one 3. More than one

13. How many aerospace companies have you contacted regarding jobs?

(42)- 1. None
2. 1-5
3. 6-15
4. 16-50
5. more than 50

14. How many nonaerospace companies have you contacted regarding jobs?

(44) 1. None
2. 1-5
3. 6-15
4. 16-50
5. more than 50

SECTION III TO BE COMPLETED BY PERSONS WHO HOLD FULL-TIME JOBS WHICH THEY DID NOT HAVE 2 MONTHS AGO.

15. In what industry are you employed? _____ (68)-_____

16. To what degree do you feel you are using your aerospace experience?

(69)- 1. Considerably
2. Somewhat
3. Very little
4. Not at all

17. To what degree do you feel you are using your professional skills?

(70)- 1. Considerably
2. Somewhat
3. Very little
4. Not at all

18. In your opinion, who or what was mainly responsible for getting you this job?

(72)- _____ (72)-_____

_____

_____

_____

THANK YOU FOR YOUR COOPERATION AND HELP. PLEASE CHECK TO MAKE SURE YOU HAVE ANSWERED THE APPROPRIATE QUESTIONS, AND RETURN THIS QUESTIONNAIRE TO AIAA IN THE ENCLOSED, STAMPED ENVELOPE. IF YOU WOULD LIKE TO ADD ANY COMMENTS, PLEASE USE THE REMAINING SPACE ON THIS PAGE.

Exhibit 2c

SIX MONTH FOLLOW-UP QUESTIONNAIRE

American Institute of Aeronautics and Astronautics

1290 Avenue of the Americas, New York, N.Y. 10019 212 581-4300

Please circle the number in front of the statement which best describes your situation or opinion

1. Are you now employed in a full-time, hopefully permanent job?

(73) 1. Yes, in the aerospace industry.
2. Yes, not in the aerospace industry.
3. No, or only part-time or temporarily.

NOTE: If your answer to the above question is "No", omit the rest of the questions and return the form to AIAA.

2. What is your salary?

(74) 1. less than $13,000
2. $13,001 - $15,000
3. $15,001 - $17,000
3. $17,001 - $20,000
4. $20,001 - $25,000
5. more than $25,000

3. In what industry are you employed? _____ (75) _____

4. To what degree do you feel you are using your aerospace experience?

(76) 1. Considerably
2. Somewhat
3. Very little
4. Not at all

5. To what degree do you feel you are using your professional skills?

(77) 1. Considerably
2. Somewhat
3. Very little
4. Not at all

6. Did the Workshop help you obtain this job?

(78) 1. Definitely yes
2. Perhaps
3. No

7. In your opinion, who or what was mainly responsible for getting you this job?

_____ (79) _____

Please use reverse side for comments

COMMENTS

TABLE 1

Permanent Employment Status of Participants at Time of Attendance (N = 1766*)

Employed	26%
Unemployed	74%

*Participants who attended at least one session of a workshop. Non respondents have been eliminated. Data collected at time of workshop.

TABLE 2

Current or Last Full Time Incomes of Workshops Participants at Time of Attendance

(N = 1536*)

Under $13,000	32%
$13-15,000	21%
$15-17,000	17%
$17-20,000	21%
$20-25,000	7%
Over $25,000	1%

*Participants who attended at least one session of a workshop. Non respondents have been eliminated. Data collected at time of workshop.

TABLE 3

Time Out of Work for Unemployed Participants at Time of Attendance (N = 1171*)

Unemployed for:	
Less than 4 weeks	15%
4 - 12 weeks	19%
13 - 24 weeks	20%
25 - 52 weeks	24%
Over 52 weeks	22%

*Participants who attended at least one session of a workshop. Non respondents have been eliminated. Data collected at time of workshop.

TABLE 4

Percentage Who Had Contacted Their State Employment Service (SES) and Their Perceptions of "Helpfulness"

(N = 1555*)

Contacted	69%
Not contacted	31%

(N = 625*)

Contacted SES and found it:

Helpful	26%
"Mixed" reactions	4%
Not helpful	70%

*Participants who attended all three sessions of a workshop and were unemployed at the time of the workshop. Non respondents have been eliminated. Data collected at time of workshop.

TABLE 5

Preparation of More than One Version of Resume as Reported at Time of Attendance at Workshop

(N = 1651*)

No resume prepared	9%
Only one resume prepared	38%
More than one resume prepared	53%

*Participants who attended at least one session of a workshop. Non respondents have been eliminated. Data collected at time of workshop.

TABLE 6

Number of Companies Contacted by Workshop Participants at Time of Attendance (N = 1344*)

	Aerospace	Non-aerospace
None	23%	12%
1 - 5	31%	17%
6 - 15	20%	18%
16 - 50	18%	32%
Over 50	8%	21%

* Participants who attended at least one workshop. Non respondents have been eliminated. Data collected at time of workshop.

TABLE 7

Workshop Attendance Rates by Session;
Percentage of Those Attending First Session Who Attend Second and Third Sessions.

Attendance at first session	100%
Attendance at second session	74%
Attendance at third session	62%

TABLE 8

Evaluation of Workshop by Participants (N = 1133*)

Favorable ("Very" or "quite valuable")	91%
Not favorable ("of little value" or "not valuable")	9%

Reasons Given for Evaluation of Workshop (N = 1133*)

Favorable:	
Learned specific techniques (resume writing; interview, etc.)	58%
Learned strategies of job hunting	38%
Learned to define career goals	38%
Other answers (non-specific)	22%
Not favorable:	
Non-specific	9%

Note: Entries in this table refer to percentages of respondents who gave these answers; multiple answers are included so that percentages in both add to more than 100%.

*Participants who attended all three sessions of a workshop. Non respondents have been eliminated. Data collected at time of workshop.

TABLE 9

New Employment Rates Two Months After Workshop

Among those who attended all three sessions of a Workshop (and a "comparison" group who attended none) and who were seeking employment during the two month follow-up period.

(Based on those who responded to mail questionnaire)

	Attendees	Comparison
N	459*	143*
Found permanent job:		
in aerospace	8%	5%
in non-aerospace	15%	22%
Total found jobs	23%	27%
Remained unemployed	77%	

*Unemployed at date of Workshop (425 and 130, for Attendees and Comparison, respectively) or became unemployed in subsequent two months (34 and 13, respectively).

TABLE 10

Estimated New Employment Rate Six Months After Workshop

Among those who attended all three sessions of Workshop and who were seeking employment during two month period. (Estimate based on those who responded to six month follow-up questionnaire, taken as representative of those who reported themselves unemployed at two month follow-up.)

(N = 251*)

Found permanent job	42%
Remained unemployed	58%

*This is the number who responded to the six month follow-up questionnaire, from among the 356 individuals who reported themselves as unemployed at the time of the two month follow-up. Of this 251, 25% had since found permanent employment. Applying this percentage to 356, we estimate that 89 had found employment. Adding this estimated number to the 103 who had found permanent employment at the time of the two month follow-up gives 192 out of 459 who responded to that follow-up and who had been unemployed at the time of the workshop or who became unemployed within two months. 192/459 = 42%.

56

TABLE 11

Comparison of Salaries Earned Before Workshop Participant Became Unemployed and in New Permanent Job by Those Who Attended All Three Workshops. (Based on those who returned two month follow-up questionnaire)

	Former Salary	Salary Reported at Time of 2-month follow-up
N	193*	193*
Below $13,000	28%	38%
$13 - 15,000	24%	25%
$15 - 17,000	15%	16%
$17 - 20,000	21%	13%
$20 - 25,000	10%	6%
Over $25,000	2%	2%

N = 193*

Increased income	15%
Decreased income	38%
No change	47%

*Non respondents have been eliminated.

57

TABLE 12

Reported Use of Aerospace Experience in New Job by Those Who Attended All Three Sessions of a Workshop (and a "comparison" group). Based on those who responded to mail questionnaires.)

	Found jobs within 2 months of date of workshop				Found jobs in 2-6 months following Workshop
	Attended Workshop			Did not attend Workshop (comparison)	
	Found job in aerospace	Found job in non-aerospace	Total aerospace & non-aerospace		
N	35*	66*	101*	42*	66*
Use of aerospace experience:					
Considerable	76%	20%	39%	24%	31%
Somewhat	14%	30%	24%	19%	22%
Very little	5%	25%	19%	22%	34%
Not at all	5%	25%	17%	34%	13%

*Non respondents have been eliminated.

TABLE 13

Reported Use of Professional Skills in New Job by Those Who Attended All Three Sessions of a Workshop (and a "comparison" group). (Based on those who responded to mail questionnaires.)

	Found jobs within 2 months of Workshop				Found jobs in 2-6 months following Workshop
	Attended Workshop			Did not attend Workshop (comparison)	
	Found job in aerospace	Found job in non-aerospace	Total aerospace & non-aerospace		
N	36*	68*	104*	43*	63*
Use of professional skills:					
Considerable	64%	54%	57%	62%	63%
Somewhat	27%	28%	28%	9%	25%
Very little	8%	17%	14%	20%	11%
Not at all	-	1%	1%	9%	-

*Non respondents have been eliminated.

TABLE 14

Reported Industry of New Employment of Those Who Attended All Three Sessions of a Workshop (and a "comparison" group). (Based on those who responded to mail questionnaires.)

	Found jobs within 2 months of date of Workshop		Found jobs in 2-6 months following Workshop
	Attended Workshop	Did not attend Workshop (Comparison)	
N	97*	43*	63*
Aerospace	33%	19%	21%
Aerospace allied	6%	7%	10%
Other high technology	18%	34%	22%
Trades and professions	21%	12%	14%
Other manufacturers	12%	14%	6%
Government	6%	-	3%
Sales and services	3%	12%	14%
Other	1%	2%	10%

*Non respondents have been eliminated.

TABLE 15

Demographic Characteristics of Those Who Attended All Three Sessions of a Workshop and Were Seeking Employment during a 2 Month Follow-up Period. Analyzed by employment status at time of 2 and 6 month follow-up period.

(a) Age

	Finders of jobs 0 - 2 months after Workshop	Between 2 - 6 months after Workshop	Still unemployed after 6 months
N	105*	63*	188*
Age:			
25 - 34	29%	14%	18%
35 - 44	40%	40%	21%
45 - 54	28%	37%	48%
Over 55	3%	10%	13%

(b) Education

	Finders of jobs between:		Still unemployed after 6 months
	0 - 2 months after Workshop	2 - 6 months after Workshop	
N	105*	63*	188*
Less than Bachelors	9%	6%	11%
Bachelors	39%	43%	38%
More than Bachelors (not Masters)	29%	32%	26%
Masters	13%	11%	12%
More than Masters (not Doctorate)	7%	6%	7%
Doctorate	3%	2%	5%

* Non respondents have been eliminated.

TABLE 16

Academic Areas and Professional Fields of those Who Attended All Three Sessions of a Workshop and Were Seeking Employment during 2 Month Follow-up Period

(a) Academic Areas

	Finders of jobs between:		Still unemployed after 6 months
	0 - 2 months after Workshop	2 - 6 months after Workshop	
N	105*	63*	188*
Academic area:			
Aerospace engineering	27%	21%	24%
Electrical engineering	28%	27%	16%
Mechanical engineering	20%	29%	27%
Others	25%	23%	33%

(b) Professional Fields

	Finders of jobs between:		Still unemployed after 6 months
	0 -2 months after Workshop	2 - 6 months after Workshop	
N	90*	57*	167*
Professional fields:			
Aircraft Design and Operations	34%	26%	26%
Information Systems	18%	23%	18%
Materials & Structures	15%	18%	19%
Flight Mechanisms & Control	11%	15%	11%
Missile & Space Systems	31%	35%	37%
Vehicle Support & Testing	30%	33%	31%
Management, etc.	22%	32%	30%
Others	17%	11%	20%

*Non respondents have been eliminated. Multiple answers are included.

TABLE 17

Types of Companies Contacted by Those Who Attended All Three Sessions of Workshop and Were Seeking Employment during 2 Month Follow-up Period (and a "comparison" group). (Based on those who responded to 2-month follow-up questionnaire.)

	Attendees	Comparison
N	399*	106*
Contacted by time of 2-month followup		
All aerospace	85%	85%
Aerospace allied	59%	43%
Other high technology	52%	58%
Trades and professions	52%	45%
Other manufacturers	48%	43%
Government	41%	41%
Sales and services	27%	40%
Other	15%	17%

* Non respondents have been eliminated.

TABLE 18

Number of Companies Contacted by Those Who Attended All Three Sessions of a Workshop and Were Seeking Employment during 2-month Follow-up Period (and a "comparison" group). (Based on those who responded to 2-month follow-up questionnaire.)

	Attendees	Comparison
N	418*	136*
Aerospace companies contacted by time of 2-month follow-up:		
None	16%	20%
1 - 5	39%	34%
6 - 15	24%	23%
16 - 50	14%	15%
Over 50	7%	8%
N	432*	134*
Non aerospace companies contacted by time of 2-month follow-up:		
None	3%	6%
1 - 5	13%	13%
6 - 15	15%	23%
16 - 50	34%	33%
Over 50	34%	25%

*Non respondents have been eliminated.

TABLE 19

Contacts with and Perceptions of "Helpfulness" of State Employment Services (SES) among Those Who Attended All Three Sessions of a Workshop and Were Seeking Employment during 2-month Follow-up Period (and a "comparison" group). (Based on those who responded to 2-month follow-up questionnaire.)

	Attendees	Comparison
N	432*	132*
Contacted prior to date of Workshop	76%	83%
Contacted after date of Workshop	17%	10%
Not contacted	7%	7%
N	392*	121*
Contacted SES and found it: Helpful	26%	18%
Not helpful	74%	82%

*Non respondents have been eliminated.

TABLE 20

Preparation of More than One Version of Resume among Those Who Attended All Three Sessions of a Workshop (and a "comparison" group who attended none) and Who Were Seeking Employment during 2-month Follow-up Period. (Based on those who responded to mail questionnaire.)

	Attendees	Comparison
N	432*	132*
No resume prepared		3%
One resume only prepared	9%	24%
More than one resume prepared	91%	73%

*Non respondents have been eliminated.

TABLE 21

Changes in Job-Seeking Approach Reported at 2-Month Follow-up and Attributed to Workshop by Those Who Attended All Three Sessions. (Based on those who responded to mail questionnaires.)

	Responded to 2 month questionnaire and had found permanent employment within two months after Workshop.	Responded to 6 month follow-up questionnaire:	
		Had found permanent employment in the 2-6 months after Workshop	Still unemployed 6 months after Workshop
N	90*	59*	166*
Changes:			
Improved resumes	55%	73%	67%
Improved letters	24%	39%	36%
Improved interview techniques	23%	29%	17%
Improved "attitude" or "morale"	13%	12%	11%
Other	7%	9%	8%

* Non respondents have been eliminated.

TABLE 22

Perceived Value of Workshop in Finding New Job by Those Who Attended All Three Sessions. (Based on those who responded to mail questionnaires).

	Found jobs within 2 months of Workshop	Found jobs within 2 - 6 months of Workshop
N	104*	63*
Definitely yes	18%	19%
Perhaps	36%	37%
No	46%	44%

*Non respondents have been eliminated.

TABLE 23

Factors Perceived to Be "Mainly Responsible" in getting New Jobs by Those Who Attended All Three Sessions of a Workshop (and a "comparison" group). (Based on those who responded to mail questionnaire.)

	Found jobs within 2 months of date of Workshop:		Found jobs in 2 - 6 months following Workshop
	Attended Workshop	Did not attend Workshop (comparison)	
N	101*	43*	61*
Experience/"Myself"/Persistence, etc.	50%	68%	24%
Friends	39%	39%	30%
Workshop	15%	-	11%
Employment agency	5%	11%	6%
State Employment Service	2%	2%	2%
Newspaper advertisement	6%	5%	6%
Other	12%	8%	20%

*Non respondents have been eliminated.

TABLE 24

Evaluation of Aspects of Workshop Program by Those Who Attended All Three Sessions - "In Light of Experience since the Workshop" - As Reported at 2-month Follow-up (Based on those who responded to 2-month follow-up questionnaire.)

Importance to Participant

	Much	Some	Little	Total	N*
Awareness of employment trends	41%	39%	19%	100%	545
Defining personal goals	40%	42%	18%	100%	551
Researching job prospects	43%	43%	14%	100%	557
Knowing about job agencies	19%	47%	34%	100%	551
Improving letters and resumes	75%	22%	3%	100%	563
Improving interview skills	63%	30%	7%	100%	557

Help Received to Improve Employment Chances

	Much	Some	Little	Total	N*
Awareness of employment trends	21%	46%	33%	100%	520
Defining personal goals	16%	50%	34%	100%	526
Researching job prospects	25%	50%	25%	100%	532
Knowing about job agencies	15%	45%	40%	100%	532
Improving letters and resumes	62%	32%	6%	100%	538
Improving interviewing skills	43%	41%	16%	100%	538

*Non respondents have been eliminated.

TABLE 25

Suggested Improvements in Workshop Content from Those Who Attended All Three Sessions and Were Seeking Employment during 2-month Follow-up Period. (Submitted two months after Workshop.) (Based on those who responded to 2-month follow-up questionnaire.)

N = 294*

Emphasize interviews	23%
Placement service	20%
Emphasize resumes	10%
More Sessions	8%
More specific discussion	8%
Better instructors	7%
Miscellaneous	49%
Nothing	15%

*Non respondents have been eliminated.

TABLE 26

Willingness to Recommend Workshop among Those Who Attended All Three Sessions (Based on those who responded to 2-month follow-up questionnaire)

(N = 563*)

Would recommend even to employed persons	77%
Would recommend to unemployed persons	20%
Total "would recommend"	97%
Would not recommend	3%

*Non respondents have been eliminated.